

WHAT IS CLAIMED IS:

- 1 1. A metal framing member comprising:
2 a formed metal sheet including a plurality of expanded web slots in a region of the
3 formed sheet metal.
- 1 2. The member of claim 1, wherein the expanded web slots include voids and metal
2 web elements in the region of the framing member.
- 1 3. The member of claim 1, wherein the formed metal sheet includes a web region and
2 a first flange extending from the web region.
- 1 4. The member of claim 3, wherein the formed metal sheet further includes a second
2 flange extending from the web region in a direction substantially parallel to the first flange.
- 1 5. The member of claim 3, wherein the web region includes the expanded web slots.
- 1 6. The member of claim 3, wherein the first flange includes the expanded web slots.
- 1 7. The member of claim 3, wherein each of the web region and the first flange
2 includes the expanded web slots.
- 1 8. The member of claim 5, wherein each of the web region, the first flange and the
2 second flange includes the expanded web slots.
- 1 9. The member of claim 4, wherein the formed metal sheet further includes a closing
2 region extending the first flange to the second flange to form a substantially tubular structure.
- 1 10. The member of claim 9, wherein each of the web region, the first flange, the
2 second flange and the closing region includes the expanded web slots.
- 1 11. The member of claim 1, wherein each web slot extends along a portion of a
2 length of the member.

1 12. The member of claim 1, wherein the plurality of web slots is arranged in offset
2 columns substantially parallel to a length of the member.

1 13. The member of claim 1, wherein the plurality of web slots form three or more
2 columns of slots along the length of the member.

1 14. The member of claim 13, wherein the plurality of web slots form five or more
2 columns of slots along the length of the member.

1 15. The member of claim 2, further comprising reinforcements in the web elements.

1 16. The member of claim 15, wherein the reinforcements include flanges or darts.

1 17. A preexpanded metal framing member comprising:
2 a formed metal sheet having a length and including a web region and two flanges,
3 each flange extending from the web region, and
4 a plurality of web slots extending along a portion of the length in the web region or at
5 least one of the flanges.

1 18. The member of claim 17, wherein the flanges extend from the web region in a
2 direction substantially parallel relationship.

1 19. The member of claim 17, wherein the web region includes the web slots.

1 20. The member of claim 17, wherein each flange includes the web slots.

1 21. The member of claim 17, wherein each of the web region and the flanges
2 includes the web slots.

1 22. The member of claim 17, wherein the formed metal sheet further includes a
2 closing region extending between the flanges to form a substantially tubular structure.

1 23. The member of claim 22, wherein each of the web region, the first flange, the
2 second flange and the closing region includes the expanded web slots.

1 24. The member of claim 17, wherein the plurality of web slots is arranged in offset
2 columns substantially parallel to a length of the member.

1 25. The member of claim 17, wherein the plurality of web slots form three or more
2 columns of slots along the length of the member.

1 26. The member of claim 25, wherein the plurality of web slots form five or more
2 columns of slots along the length of the member.

1 27. A method of manufacturing a framing member comprising:
2 providing a formed metal sheet having a length and a web region; and
3 placing a plurality of slots along a portion of the length in the web region.

1 28. The method of claim 27, wherein providing the formed metal sheet includes roll
2 forming a metal sheet.

1 29. The method of claim 27, wherein placing the plurality of slots includes piercing
2 slots into the region.

1 30. The method of claim 27, wherein placing the plurality of slots includes stamping
2 the slots into the region.

1 31. The method of claim 27, further comprising expanding the slots of the web
2 region to form expanded slots having a web element and a web void.

1 32. The method of claim 31, wherein expanding the slots includes passing the formed
2 metal sheet over a tapered block.

1 33. The method of claim 31, wherein expanding the slots includes mechanically
2 moving sides of the region apart.

1 34. The method of claim 31, further comprising reinforcing the expanded formed
2 metal sheet.

1 35. The method of claim 34, wherein reinforcing includes placing a flange or dart in
2 the web element.

1 36. The method of claim 27, wherein the formed metal sheet includes a first flange
2 extending from the web region and a second flange extending from the web region in a
3 direction substantially parallel to the first flange.

1 37. The method of claim 27, further comprising placing a plurality of slots along a
2 portion of the length in each of the first flange and the second flange.

1 38. The method of claim 37, further comprising expanding the slots of the first flange
2 and the second flange.

1 39. The method of claim 36, wherein the formed metal sheet further includes a
2 closing region extending the first flange to the second flange to form a substantially tubular
3 structure.

1 40. The method of claim 27, wherein placing the plurality of slots includes arranging
2 the slots in offset columns substantially parallel to a length of the member.

1 41. The method of claim 31, further comprising heat treating the member after
2 expanding the slots.

1 42. A method of building a structure comprising:
2 placing an expanded framing member in a portion of the structure, the expanded

3 framing structure including a plurality of expanded web slots forming a plurality of voids in a
4 region of the framing member.

1 43. The method of claim 42, further comprising installing wiring, plumbing or a
2 heating duct through at least one void of the member.